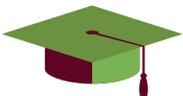




**MARY KAY O'CONNOR  
PROCESS SAFETY CENTER**  
TEXAS A&M ENGINEERING EXPERIMENT STATION



# Process Safety for the 21st Century and Beyond



# Process Safety for the 21st Century and Beyond

## What are the key challenges for process safety in the 21st century? How should we tackle them for betterment of the future?

This document gathers responses from industry, academia, regulatory and societal experts from around the globe to identify the challenges and build a road map for the future of process safety.

## Why was this initiative started?

Because even with the advances we have made in process safety, incidents continue to happen. The causes of these incidents are not new so why are we not learning from our past mistakes? How can we enhance process safety for a safer future? This document seeks the answers.

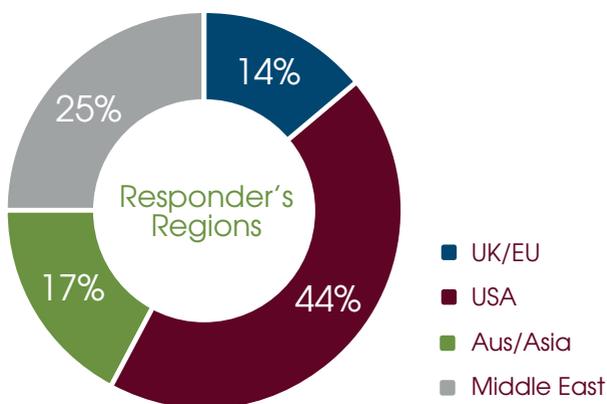
## Who took up the initiative?

This initiative is the result of a joint collaboration between Institution of Chemical Engineers (IChemE) Safety Centre and the Mary Kay O' Connor Process Safety Center (MKOPSC) along with experts in process safety in various working sectors around the globe.

## What is the process?

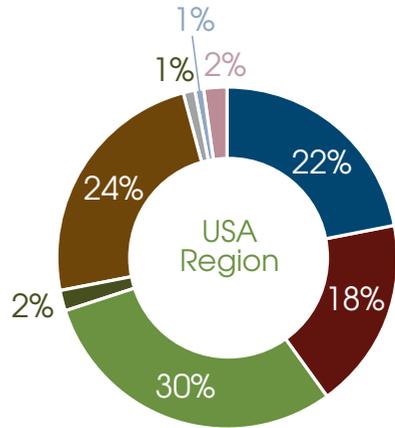
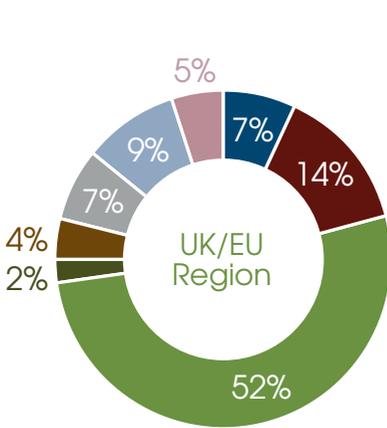
Professionals from various levels of industry, academia and regulatory bodies met in a series of workshops and discussed to answer questions and identify the key challenges to process safety in each area. Based on these brainstorming session, a committee with process safety experts laid out a series of new and novel ways to address the challenges at various levels and across all stakeholders to improve process safety in the future.

**Important Fact:** One challenge that appeared to be common in all stakeholders' discussion is the issue of competency.

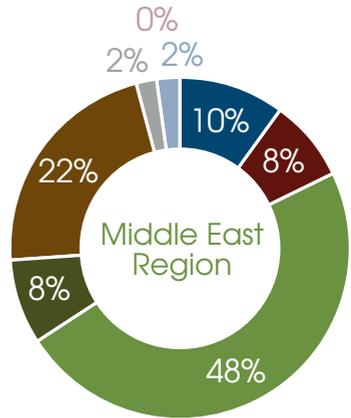
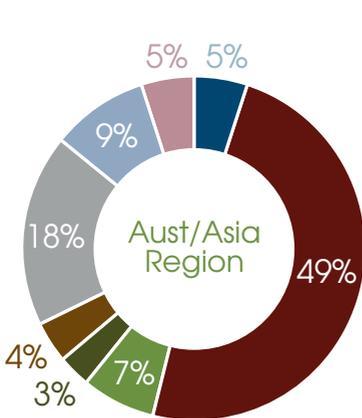


Regional workshops ensured large participation from different countries around the globe \*

\*Disclaimer: Responses were not mandatory, data shown here are representative of the variety of attendees and may not reflect actual numbers.



- Academia
- Engineers
- Managers
- Other
- Consultants
- Executives
- Operators
- Regulators



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**Responses were obtained from professionals in various sectors to identify the challenges they faced when it came to ensuring safer processes\***

We also wanted to acknowledge the existing initiatives already undertaken by each stakeholder.

**Important Fact:** Did you know ABET and IChemE require the integration of process safety into the curriculum?

**Important Fact:** Did you know most of the regulatory bodies or legislation frameworks were formed due to a major process incident?

**What's next?**

This document is the ultimate roadmap for the future of process safety. This unique initiative will provide recommendations to anyone interested in improving process safety performance in the future generation.

**What's in it for me?**

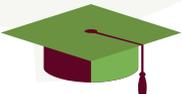
If all stakeholders collaborate and work together, talking about process safety would become easier and we may get better safety and business outcomes..

Call for action! Come join us!



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Incorporated by Royal Charter 1957. The Institution of Chemical Engineers (trading as IChemE) is a registered charity in England and Wales (214379) and Scotland (SC039661). The Institution also has associated entities in Australia, Malaysia, New Zealand and Singapore.

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Established by Board of Regents Minute Order 323-95 in 1995. The Mary Kay O'Connor Process Safety Center has associated entities in Bangladesh, Colombia and Qatar.



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